

CLAIMS

1. A system for controlling a bandwidth when receiving and reassembling a consecutive data stream transferred while segmented by AAL1 format cells,
5 comprising

an 8-cell buffer, in a data reassembly unit which reassembles received cells, for storing 8 cells of a cycle of a sequence count (SC) of 0 to 7 and sending the cells out to a later stage after a check unit of a sequence number (SN) field confirms normalcy of the
10 cells and

15 a control unit for control so that the number of P format cells stored in said 8-cell buffer becomes 1 cell when 8 cells are stored in said 8-cell buffer.

20 2. A system for controlling bandwidth as set forth in claim 1, wherein the system sets a cell of the sequence count 6 as a P format cell unconditionally when detecting that the cells stored in the 8-cell buffer do not include a P format cell.

25 3. A system for controlling bandwidth as set forth in claim 1, wherein the system sets as a P-format cell a cell of the largest even number sequence count (SC) among a plurality of dummy cells or cells where the sequence number (SN) field is invalid when the cells stored in the 8-cell buffer do not include a P-format cell and there are a plurality of one or both of dummy cells or cells where the sequence number (SN) field is invalid.

30 4. A system for controlling bandwidth as set forth in claim 1, wherein the system sets as a non-P format cell unconditionally any cell of a sequence number (SN) field of an odd number sequence count (SC) which is a P format cell among the cells stored in the 8-cell buffer.

35 5. A system for controlling bandwidth as set forth in claim 1, wherein the system sets as a non-P format cell any cell except a cell of the largest even number sequence count (SC) when there are a plurality of P-

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format cells in the cells stored in the 8-cell buffer.

6. A system for controlling AAL1 cell bandwidth when reassembling a consecutive data stream having a frame structure transferred while segmented by cells of an AAL1 structured data transfer format, the system including

an internal frame counter made to run by itself and synchronized in frame phase by a boundary position of a frame set in a pointer field after confirming normalcy of a sequence number field of received cells and

said internal frame counter monitors the number of bytes of the received data and discards excess data when detecting that the boundary position of a frame is later than the period of the internal frame counter.

7. A system for controlling bandwidth as set forth in claim 6, wherein the system compensates for short data using dummy data when detecting that the boundary position of the frame is earlier than the period of the internal frame counter when monitoring the number of bytes of the received data by the internal frame counter.

8. A system for controlling AAL1 cell bandwidth when reassembling a consecutive data stream having a frame structure transferred while segmented by cells of an AAL1 structured data transfer format, the system including

a bandwidth adjusting unit for adjusting a data rate between transmitting and receiving ends after confirming normalcy of a sequence number field of a received cell and

said bandwidth adjusting unit has an internal frame counter made to run by itself and synchronized in frame phase by a boundary position of a frame set in a pointer field, and

said bandwidth adjusting unit adjusts the bandwidth by determination and control of a P/non-P format cell based on a CSI bit, sequence count (SC), flag

for discriminating a cell with an invalid sequence number (SN) field, result of detection of whether a P format cell already exists in one cycle between a sequence count of 0 and a currently received cell, and a result of
5 discrimination of whether there is a boundary position between a received even number cell and the next odd number cell by said internal frame counter.

9. A system for controlling bandwidth as set forth in claim 8, wherein the system concludes that there is a
10 boundary in one of a received even number cell and the next odd number cell and making the cells a P format when the number of frames as counted by the internal frame counter is 93.

10. A system for controlling bandwidth as set forth in claim 8, wherein the system making a cell of a sequence count (SC) of 6 a P format cell unconditionally when no P-format cell is received in one cycle of the
15 sequence count.

11. A system for controlling bandwidth when receiving and reassembling a consecutive data stream transferred while segmented by AAL1 format cells,
20 comprising

25 a cell buffer, in a data reassembly unit which reassembles received cells, for storing one cycle's worth of a number of cells and sending the cells out to a later stage after a check unit of a sequence number (SN) field confirms normalcy of the cells and

30 a control unit for control so that the number of P format cells stored in said cell buffer becomes 1 cell when the above number of cells are stored in said cell buffer.